



Duty Cycle Capacities

Boom No. 83
53,000 Lb. Counterweight
23 Ft. 6 in. Crawlers Extended
360 Degree Rating - Limited Duty

LIFTING CAPACITIES: Capacities for various boom lengths and operating radii are for freely suspended loads and do not exceed 67.5% of a static tipping load. Capacities are based on tipping, structural competence(*), operating speeds and other factors.

Duty cycle capacities shown are intended for limited duration applications. Continuous operation at these capacities may reduce component life.

Weight of bucket is considered part of load. Where no capacity is shown, operation is not intended or approved.

OPERATING CONDITIONS: Machine to operate in a level position on a firm uniformly supporting surface with gantry up. Refer to boom rigging **No. A06546** and Wire Rope Specification chart **No. 8474-C**. Crane operator judgment must be used to allow for adverse operating conditions and physical machine depreciation. Refer to operators manual for operating guidelines.

OPERATING RADIUS: Operating radius is horizontal distance from axis of rotation to center of gravity of freely suspended load. Boom angle is angle between horizontal and

centerline of boom butt and inserts, and is an indication of operating radius.

MACHINE EQUIPMENT: Machine equipped with 23 Ft. 6 in. extendible crawlers, 39-3/8 in. treads, 9 Ft. 7 in. gantry, 25 Ft. live mast, 12 part boom hoist reeving, two 1-1/2 in. pendants and 53,000 Lb. counterweight.

Upper Boom Point Deduct

Deduct 1,300 Lbs. from capacities when upper boom point is attached.

Auxiliary Drum Deduct

Deduct 2,000 Lbs. from boom capacities when boom butt is equipped with auxiliary drum.

| Oper. Rad. Feet | Boom Ang. Deg. | Boom Capacity Pounds |
|--------------------|----------------|----------------------|
| 50 Ft. Boom | | |
| 30 | 64.1 | 66,000 * |
| 35 | 57.4 | 65,400 |
| 40 | 50.0 | 54,100 |
| 45 | 41.6 | 45,700 |
| 50 | 31.2 | 39,100 |
| 60 Ft. Boom | | |
| 30 | 68.8 | 66,000 * |
| 35 | 63.4 | 65,600 |
| 40 | 57.8 | 54,300 |
| 45 | 51.8 | 45,900 |
| 50 | 45.2 | 39,400 |
| 55 | 37.6 | 34,200 |
| 60 | 28.1 | 29,900 |

| Oper. Rad. Feet | Boom Ang. Deg. | Boom Capacity Pounds |
|--------------------|----------------|----------------------|
| 70 Ft. Boom | | |
| 30 | 72.0 | 66,000 * |
| 35 | 67.5 | 65,600 |
| 40 | 62.9 | 54,300 |
| 45 | 58.1 | 46,000 |
| 50 | 53.1 | 39,500 |
| 55 | 47.6 | 34,400 |
| 60 | 41.5 | 30,200 |
| 65 | 34.5 | 26,700 |
| 70 | 25.9 | 23,700 |
| 80 Ft. Boom | | |
| 25 | 78.0 | 66,000 * |
| 30 | 74.3 | 66,000 * |
| 35 | 70.5 | 65,100 |
| 40 | 66.6 | 53,800 |
| 45 | 62.6 | 45,500 |
| 50 | 58.4 | 39,100 |
| 55 | 54.0 | 34,000 |
| 60 | 49.3 | 29,800 |
| 65 | 44.2 | 26,400 |
| 70 | 38.6 | 23,400 |
| 75 | 32.1 | 20,900 |
| 80 | 24.0 | 18,700 |

| Oper. Rad. Feet | Boom Ang. Deg. | Boom Capacity Pounds |
|--------------------|----------------|----------------------|
| 90 Ft. Boom | | |
| 25 | 79.4 | 65,900 * |
| 30 | 76.1 | 64,100 * |
| 35 | 72.8 | 62,300 * |
| 40 | 69.4 | 53,600 |
| 45 | 65.9 | 45,300 |
| 50 | 62.3 | 38,900 |
| 55 | 58.6 | 33,800 |
| 60 | 54.7 | 29,700 |
| 65 | 50.6 | 26,200 |
| 70 | 46.2 | 23,300 |
| 75 | 41.5 | 20,800 |
| 80 | 36.2 | 18,700 |
| 85 | 30.1 | 16,700 |
| 90 | 22.5 | 15,000 |

| Oper. Rad. Feet | Boom Ang. Deg. | Boom Capacity Pounds |
|---------------------|----------------|----------------------|
| 100 Ft. Boom | | |
| 25 | 80.4 | 60,800 * |
| 30 | 77.5 | 59,200 * |
| 35 | 74.5 | 57,600 * |
| 40 | 71.5 | 53,400 |
| 45 | 68.4 | 45,100 |
| 50 | 65.3 | 38,600 |
| 55 | 62.1 | 33,500 |
| 60 | 58.7 | 29,400 |
| 65 | 55.2 | 26,000 |
| 70 | 51.6 | 23,000 |
| 75 | 47.8 | 20,600 |
| 80 | 43.7 | 18,400 |
| 85 | 39.2 | 16,500 |
| 90 | 34.2 | 14,800 |
| 95 | 28.5 | 13,300 |
| 100 | 21.3 | 11,900 |



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| Oper. Rad. Feet | Boom Ang. Deg. | Boom Capacity Pounds |
|---------------------|----------------|----------------------|
| 110 Ft. Boom | | |
| 25 | 81.3 | 44,100 * |
| 30 | 78.7 | 42,400 * |
| 35 | 76.0 | 40,800 * |
| 40 | 73.3 | 39,300 * |
| 45 | 70.5 | 37,800 * |
| 50 | 67.7 | 36,400 * |
| 55 | 64.8 | 33,800 |
| 60 | 61.9 | 29,700 |
| 65 | 58.8 | 26,200 |
| 70 | 55.7 | 23,300 |
| 75 | 52.4 | 20,900 |
| 80 | 49.0 | 18,700 |
| 85 | 45.4 | 16,800 |
| 90 | 41.5 | 15,200 |
| 95 | 37.2 | 13,700 |
| 100 | 32.5 | 12,400 |
| 105 | 27.1 | 11,200 |
| 110 | 20.2 | 10,000 |
| 120 Ft. Boom | | |
| 25 | 82.1 | 42,800 * |
| 30 | 79.6 | 41,100 * |
| 35 | 77.2 | 39,400 * |
| 40 | 74.7 | 37,800 * |
| 45 | 72.2 | 36,300 * |
| 50 | 69.7 | 34,800 * |
| 55 | 67.1 | 33,400 * |
| 60 | 64.4 | 29,400 |
| 65 | 61.7 | 25,900 |
| 70 | 58.9 | 23,000 |
| 75 | 56.1 | 20,600 |
| 80 | 53.1 | 18,400 |
| 85 | 50.0 | 16,500 |
| 90 | 46.7 | 14,900 |
| 95 | 43.3 | 13,400 |
| 100 | 39.6 | 12,100 |
| 105 | 35.6 | 10,900 |
| 110 | 31.1 | 9,800 |
| 115 | 25.8 | 8,800 |
| 120 | 19.3 | 7,900 |

| Oper. Rad. Feet | Boom Ang. Deg. | Boom Capacity Pounds |
|---------------------|----------------|----------------------|
| 130 Ft. Boom | | |
| 25 | 82.7 | 41,700 * |
| 30 | 80.4 | 39,900 * |
| 35 | 78.2 | 38,200 * |
| 40 | 75.9 | 36,600 * |
| 45 | 73.6 | 35,000 * |
| 50 | 71.3 | 33,500 * |
| 55 | 68.9 | 32,100 * |
| 60 | 66.5 | 29,100 |
| 65 | 64.1 | 25,600 |
| 70 | 61.6 | 22,700 |
| 75 | 59.0 | 20,300 |
| 80 | 56.4 | 18,100 |
| 85 | 53.6 | 16,300 |
| 90 | 50.8 | 14,600 |
| 95 | 47.9 | 13,100 |
| 100 | 44.8 | 11,800 |
| 105 | 41.5 | 10,600 |
| 110 | 37.9 | 9,600 |
| 115 | 34.1 | 8,600 |
| 120 | 29.8 | 7,700 |
| 125 | 24.8 | 6,800 |
| 130 | 18.5 | 6,000 |
| 140 Ft. Boom | | |
| 30 | 81.1 | 38,700 * |
| 35 | 79.0 | 37,000 * |
| 40 | 76.9 | 35,300 * |
| 45 | 74.8 | 33,700 * |
| 50 | 72.7 | 32,200 * |
| 55 | 70.5 | 30,700 * |
| 60 | 68.3 | 28,700 |
| 65 | 66.1 | 25,300 |
| 70 | 63.8 | 22,400 |
| 75 | 61.5 | 19,900 |
| 80 | 59.1 | 17,800 |
| 85 | 56.6 | 15,900 |
| 90 | 54.1 | 14,200 |
| 95 | 51.5 | 12,800 |
| 100 | 48.8 | 11,500 |
| 105 | 46.0 | 10,300 |
| 110 | 43.0 | 9,200 |
| 115 | 39.9 | 8,200 |
| 120 | 36.5 | 7,300 |
| 125 | 32.8 | 6,500 |
| 130 | 28.6 | 5,700 |
| 135 | 23.8 | 5,000 |
| 140 | 17.8 | 4,300 |

| Oper. Rad. Feet | Boom Ang. Deg. | Boom Capacity Pounds |
|---------------------|----------------|----------------------|
| 150 Ft. Boom | | |
| 30 | 81.7 | 29,100 * |
| 35 | 79.8 | 28,200 * |
| 40 | 77.8 | 27,200 * |
| 45 | 75.9 | 26,300 * |
| 50 | 73.9 | 25,400 * |
| 55 | 71.9 | 24,600 * |
| 60 | 69.8 | 23,700 * |
| 65 | 67.8 | 22,900 * |
| 70 | 65.7 | 22,200 * |
| 75 | 63.5 | 20,000 |
| 80 | 61.4 | 17,800 |
| 85 | 59.1 | 16,000 |
| 90 | 56.9 | 14,300 |
| 95 | 54.5 | 12,800 |
| 100 | 52.1 | 11,500 |
| 105 | 49.6 | 10,400 |
| 110 | 47.0 | 9,300 |
| 115 | 44.3 | 8,300 |
| 120 | 41.5 | 7,400 |
| 125 | 38.4 | 6,600 |
| 130 | 35.2 | 5,900 |
| 135 | 31.6 | 5,200 |
| 140 | 27.6 | 4,500 |
| 160 Ft. Boom | | |
| 30 | 82.2 | 28,100 * |
| 35 | 80.4 | 27,100 * |
| 40 | 78.6 | 26,200 * |
| 45 | 76.8 | 25,200 * |
| 50 | 74.9 | 24,300 * |
| 55 | 73.0 | 23,400 * |
| 60 | 71.1 | 22,500 * |
| 65 | 69.2 | 21,600 * |
| 70 | 67.3 | 20,800 * |
| 75 | 65.3 | 19,600 |
| 80 | 63.3 | 17,500 |
| 85 | 61.3 | 15,600 |
| 90 | 59.2 | 14,000 |
| 95 | 57.1 | 12,500 |
| 100 | 54.9 | 11,200 |
| 105 | 52.6 | 10,000 |
| 110 | 50.3 | 8,900 |
| 115 | 47.9 | 8,000 |
| 120 | 45.4 | 7,100 |
| 125 | 42.8 | 6,300 |
| 130 | 40.1 | 5,500 |
| 135 | 37.1 | 4,800 |
| 140 | 34.0 | 4,200 |

| Oper. Rad. Feet | Boom Ang. Deg. | Boom Capacity Pounds |
|---------------------|----------------|----------------------|
| 170 Ft. Boom | | |
| 30 | 82.7 | 27,200 * |
| 35 | 81.0 | 26,200 * |
| 40 | 79.3 | 25,200 * |
| 45 | 77.6 | 24,200 * |
| 50 | 75.8 | 23,200 * |
| 55 | 74.1 | 22,300 * |
| 60 | 72.3 | 21,400 * |
| 65 | 70.5 | 20,500 * |
| 70 | 68.7 | 19,600 * |
| 75 | 66.9 | 18,800 * |
| 80 | 65.0 | 17,100 |
| 85 | 63.1 | 15,300 |
| 90 | 61.2 | 13,600 |
| 95 | 59.3 | 12,200 |
| 100 | 57.3 | 10,900 |
| 105 | 55.2 | 9,700 |
| 110 | 53.1 | 8,600 |
| 115 | 50.9 | 7,600 |
| 120 | 48.7 | 6,800 |
| 125 | 46.4 | 5,900 |
| 130 | 44.0 | 5,200 |
| 135 | 41.5 | 4,500 |